

# *Emerson Television*

## **O***perating* **I***nstructions*



**EMERSON RADIO AND PHONOGRAPH CORPORATION**

**Jersey City, N. J.**

# *Emerson Radio*

## **OPERATING INSTRUCTIONS FOR EMERSON TELEVISION RECEIVER**



### **TYPE**

The Emerson Television Receiver is a quality engineered instrument, precision made to produce pictures with high definition, fine detail and brilliance—with the accompanying high fidelity sound provided by the *Staticlear* FM circuit. A few minutes spent in reading these pages will be well repaid by a better understanding of, and greater enjoyment from, your new television receiver.

### **POWER SUPPLY**

Unless otherwise specified on the flyleaf enclosed in this booklet, the voltage for operation is 115 volts, 60-cycle alternating current (a.c. only). Before making any connections be certain that you have this type of power.

### **RANGE**

This receiver operates on all existing VHF television channels 2-13 (54-88 and 174-216 megacycles inclusive) as allocated by the Federal Communications Commission.

Receivers equipped for VHF reception only will also operate on all UHF channels when proper accessories are installed.

Receivers equipped for both VHF and UHF television reception operate on all existing UHF television channels 14-83 (470-890 megacycles inclusive), in addition to VHF channels 2-13.

For further information regarding your television receiver refer to additional instructions enclosed.

### **PLACEMENT**

Consider carefully the location of the television receiver. Place the receiver where a minimum of bright light falls on the screen, although complete darkness is not necessary or recommended. Select the location which will give maximum visibility and where antenna and power outlet can be conveniently available.

Television receivers require ventilation. Do not cover ventilation holes or slots. Locate receiver so that its back will be at least four inches away from the wall.

## **INSTALLATION**

While your Emerson television receiver is unusually easy to install, you may find that competent installation can best be made by qualified Emerson-approved television service personnel. The dealer from whom you purchased this instrument can arrange to install and explain its operation.

## **CONTROLS**

This television receiver is equipped with Emerson Simplimatic tuning controls. Operation is accomplished by these controls. Function and location of each control is indicated in the illustration on the fly-leaf enclosed in this booklet.

## **OPERATION AND TUNING**

1. Turn the OFF - VOLUME control clockwise approximately a quarter turn. This turns the receiver on and sets volume to a reasonable level.
2. Allow approximately 15 seconds for warm-up. This time is necessary to allow the tubes to attain temperature for operation.
3. Set the STATION SELECTOR to the desired channel number. This control may be rotated in either direction.
4. If the desired station is telecasting, music or speech will be heard. Adjust the FINE TUNING control for best picture quality. Readjust the VOLUME for desired sound level.
5. Rotate the CONTRAST control for desired picture contrast and intensity.
6. If necessary adjust the BRIGHTNESS control and make any other adjustments required as indicated on the illustration on the flyleaf enclosed in this book.

## **TO CHANGE STATION DURING OPERATION**

1. Set the STATION SELECTOR to desired channel number.
2. Readjust the FINE TUNING control, if necessary, to obtain best picture quality.
3. Readjust the CONTRAST control slowly until the desired picture quality is obtained.
4. Readjust VOLUME control to suitable level.

## **TO TURN RECEIVER OFF**

Turn the VOLUME control to the extreme counterclockwise position. A click will be heard, indicating that the receiver is turned off.

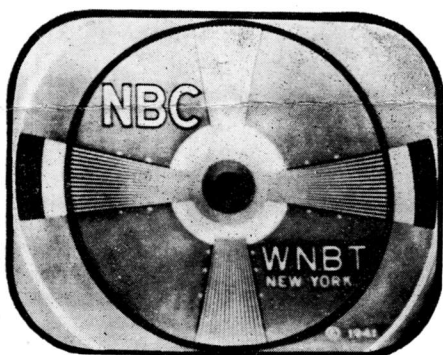
## PICTURE CONTROL SETTINGS

Figures 2-7 indicate most of the visual effects caused by proper and improper control adjustments. The illustrations were made of a test pattern, which is usually telecast prior to the start of a program. The test pattern permits adjustment of a receiver and indicates to the experienced technician, behavior of the circuits during installation or repair. The pattern varies with stations, and sometimes is accompanied by music or a continuous tone.

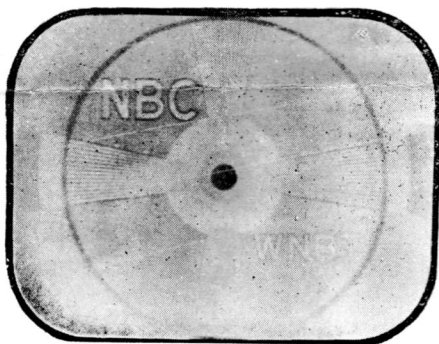
## INTERFERENCE

Emerson engineers have designed into your television receiver all known methods of suppressing interference from the many possible sources. Static, which manifests itself audibly in radio reception, reveals itself in television visually. Possible sources of excessive interference in your locality should be studied and checked before installation is made. The antenna installation must take these facts into consideration.

Typical interferences are illustrated in *Figures 8-11*.



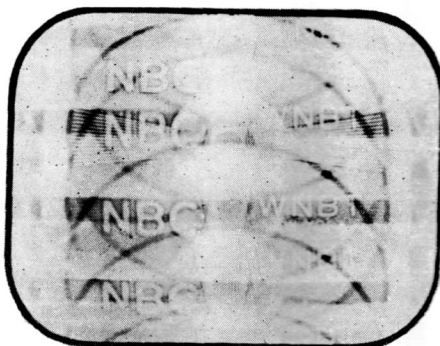
*Figure 2—Correctly Adjusted*



*Figure 3—Too Much Brightness*



*Figure 4—Too Much Contrast*



*Figure 5—Verticle Hold Misadjusted*

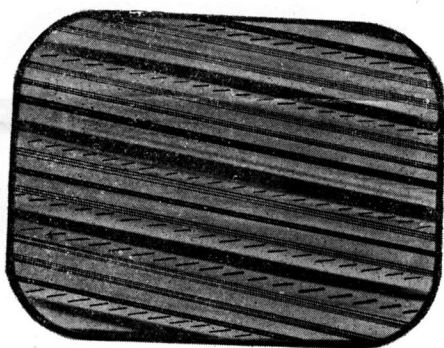
Automobile ignition causes speckles or interrupted lines, *Figure 8*, and when this effect is severe may cause vertical picture movement. Electrical motor driven appliances — such as oil burners, fans, electric shavers, refrigerators, etc., cause similar effects.

Electrically operated medical equipment such as diathermy, causes a herring-bone pattern across the screen, *Figure 9*. Proximity to such equipment may obliterate part of the picture.

Radio frequency interference from transmitting and receiving short-wave equipment may cause interference in the form of moving diagonal lines through the picture, *Figure 10*. FM broadcasting stations may cause similar interference.

Reflections or “ghosts” which appear as multiple images, *Figure 11*, are caused by signals arriving at the receiver from different points — one usually directly from the transmitter, and others by reflection from buildings, mountains, large bridges, etc., between your antenna and that of the television transmitter.

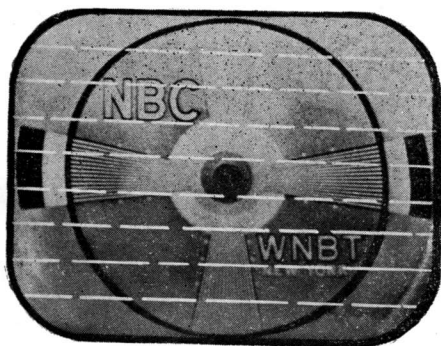
Location of the antenna as far-removed from the highway as possible will aid in eliminating ignition interference. By repairing defective electrical equipment or adding filters to the line of the offending equipment, elimination of electric motor interference will be aided. To reduce and possibly eliminate diathermy and short-wave interference and reflected ghosts, antenna readjustment or relocation may be helpful.



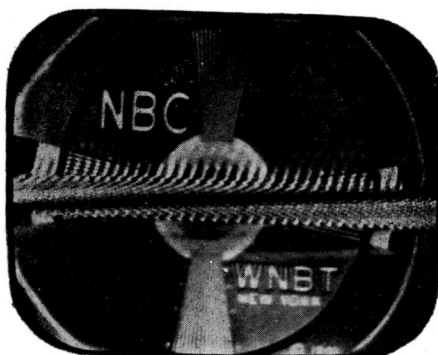
*Figure 6—Horizontal Hold Misadjusted*



*Figure 7—Tuning Misadjusted*



*Figure 8—Automobile Interference*



*Figure 9—Diathermy Interference*

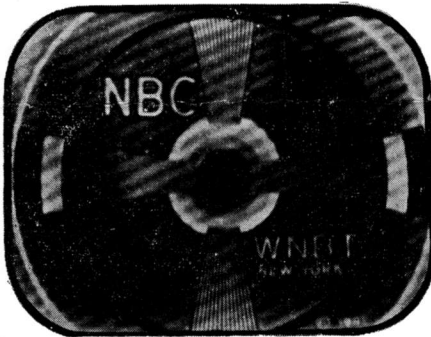
## WEAK PICTURES

When installation is near the limit of the service area of a television station, the picture may become speckled — having a “snow” effect — with the background very light even with Contrast control at full clockwise position, *Figure 12*. Further, the picture may not hold steadily on the screen. This is caused either by a lack of signal strength from the transmitter or a defective or improper antenna, which should be checked by competent service personnel.

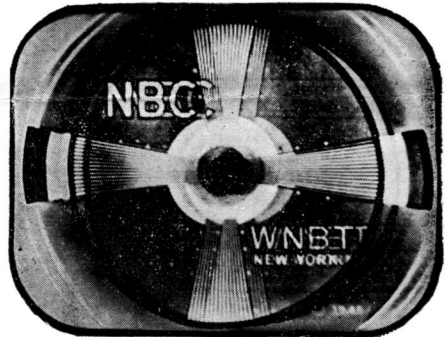
In some cases of fringe area television reception, a special installation may be required using a high antenna, a special type antenna and lead-in, or more than one antenna.

## ADJUSTMENTS

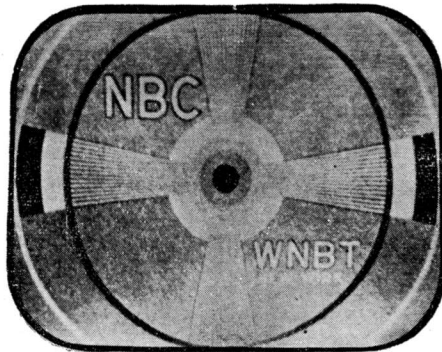
Adjustments inside the cabinet can best be made by a *qualified television service technician*. If you experience reception difficulties, tune in on another station or turn off the receiver and tune in later, as the cause may be faulty transmission. Periodic adjustments may be required to compensate for aging tubes, changes in line voltage, etc.



*Figure 10—Radio-Frequency Interference*



*Figure 11—Reflections*



*Figure 12—Weak Signal*

## STATION SELECTION

The television stations operating in your area are listed in most local newspapers with their operating schedules and channel numbers. To select a television channel, rotate the Station Selector until the desired number is indicated.

Your Emerson dealer will list the television stations operating within range of your receiver in this station log.

## STATION LOG

Channel	Station	Channel	Station

## WARRANTY

EMERSON RADIO & PHONOGRAPH CORPORATION (herein referred to as "EMERSON") warrants that each new Emerson product (including the cathode-ray picture tube originally installed in Emerson television receivers) is free from defects in material or workmanship under normal use and service for a period of 90 days from the date of sale by an authorized Emerson dealer to the first purchaser except that the warranty applicable to the cathode-ray tube shall be one year from the date of such sale. If any such defect occurs during the warranty period, the aforesaid purchaser should immediately communicate with the authorized Emerson dealer from whom the Emerson product was purchased. The dealer will furnish or arrange for repairs or replacement of the defective part within the terms of this warranty. The defective part should be returned promptly by the dealer through the Emerson distributor to Emerson's factory, transportation prepaid. If, upon examination by Emerson, the part is determined to be defective, Emerson will, subject to the conditions and limitations below mentioned, either repair the defective part or replace it with a new part.

Emerson shall not be obligated to furnish any labor required, or be responsible for labor charges incurred, in installing or servicing an Emerson product including the removal therefrom of any defective part or tube or the installation of a replacement part or tube; nor shall Emerson be liable for any delay or failure to furnish a replacement part resulting from any governmental restriction, priority or allocation or any other governmental regulatory order or action, or otherwise.

This warranty shall not apply to any Emerson product which has been repaired or altered in any way so as, in Emerson's judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence, or accident, nor which has had the serial number altered, effaced, or removed. Neither shall this warranty apply to any Emerson product which has been connected otherwise than in accordance with the instructions furnished by Emerson.

This warranty is expressly in lieu of all other warranties expressed or implied, and of all other obligations or liabilities on Emerson's part, and Emerson neither assumes, nor authorizes any representative or other persons to assume for it, any other liability in connection with the sale of Emerson products.

Copyright NBC test patterns shown herein are reproduced with the permission of the National Broadcasting Company, Inc.

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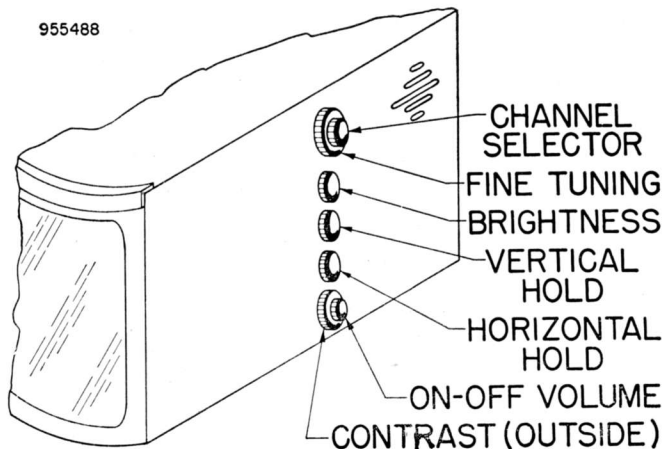


**EMERSON RADIO AND PHONOGRAPH CORP.**  
JERSEY CITY, N. J.



# Emerson Television

955488



The following controls located on rear of chassis may be adjusted by customer when necessary — Picture Stabilizer, Vert. Size and Vert. Linearity. For location of these controls see marking on back cover. All other rear controls should only be adjusted by qualified service personnel.

## IMPORTANT

This receiver has an added feature of a PICTURE STABILIZER which provides superior performance in difficult fringe areas. This control is mounted at the rear of the chassis. Adjust picture stabilizer control for steady picture in difficult fringe areas. For local signals adjust to extreme clockwise position.

## FOR TUBE LOCATIONS, SEE DIAGRAM INSIDE OF CABINET

## ANTENNA

This television receiver is equipped with a built-in antenna that will function satisfactorily in most locations. In an area of weak television signals, the use of an outside antenna may be required. Your Emerson dealer can arrange to supply you with correct antenna information and to have a proper antenna installed to give you the best television reception possible in your location. If reception conditions require the installation of an outside antenna, it may be connected to the receiver as follows:

1. Remove the two leads of the built-in antenna after loosening the two screws on the terminal strip mounted on the rear of the cabinet.
2. Connect the leads from the outside antenna to the same terminal strip screws to which the built-in antenna was connected.

## TO CLEAN TUBE FACE

Be sure receiver is turned off before removing glass.

Remove screws located in recess underneath top molding of cabinet. Remove metal strip—Glass can then be removed for cleaning of tube and mask.—To reassemble, slide glass back in groove and attach metal strip.